

Appl. No. 09/80,602
Amdt. Dated February 15, 2006
Reply to Office action of November 15, 2005

Amendments to the Drawings:

The attached sheet of drawing includes changes to Fig. 2.

Attachment: Replacement Sheet
 Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

Claims 1-6, 11-21, 26-36, and 41-45 are pending in the present application.

This Amendment is in response to the Office Action mailed November 15, 2005. In the Office Action, the Examiner objected to the drawings, rejected claims 1-6 and 16-21 under 35 U.S.C. §102(e). In addition, the Examiner indicated allowable subject matter for claims 11-15, 26-36, and 41-45. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Specification

The Examiner objected to the specification due to minor informalities. In response, Applicants have amended the specification accordingly. Therefore, Applicants respectfully request the objection be withdrawn.

Drawings

The Examiner objected to the drawings. In response, Applicants have amended the drawings as follows:

Figure 11A: change label 114 to 1134 and add label for I_d and Q_d from passive correlator 230.

Claim Objections

The Examiner objects to claims 16 and 17 due to minor informalities. In response, Applicants have amended claims 16 and 17 to correct the minor informalities. Applicants respectfully request that the Examiner withdraw the objection to claims 16 and 17.

Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-6 and 16-21 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,160,858 issued to Hindman et al. ("Hindman"). Applicants respectfully traverse the rejection and contend that the Examiner has not met the burden of establishing a prima facie case of anticipation.

Hindman discloses a MSK signal processing in a GPS correlator channel. The output of mixers 710 and 730 are received by accumulators 780 and 790, which correspond functionally to I and Q signal accumulators 280 and 290 of system 10 (Hindman, col. 13, lines 58-61). Accumulators 780 and 790 accumulate the outputs of code mixers 710 and 730 over an interval equal to one epoch and then dump the result at the end of each epoch (Hindman, col. 13, lines 58-61). The epoch duration can be achieved without causing the accumulation registers to overflow. In an alternative embodiment, the epoch can be made less than 1 millisecond corresponding to an even number of accumulations per data bit interval (Hindman, col. 14, lines 57-61).

Hindman does not disclose, either expressly or inherently, (1) a first memory having KN locations to store K sums of mixer samples during an epoch interval, the mixer samples being generated at a first clock frequency from a mixer for N channels corresponding to N satellites in a global positioning system (GPS) receiver, (2) an address counter coupled to the first memory to generate an address modulo-KN corresponding to a first location in the first memory at the first clock frequency, and (3) an adder coupled to the mixer and the first memory to add one of the mixer samples to contents of the first location to generate a sum, the sum being written into the first location.

Hindman merely discloses that two accumulators accumulate the outputs of the code mixers, not a memory to store K sums of mixer samples. An accumulator is not capable of storing information. The Examiner contends that the mixer samples are stored in the appropriate locations of the accumulator registers, citing Hindman, col. 14, lines 56-61. Applicants respectfully disagree. The cited excerpt merely states that the epoch duration can be achieved without causing the accumulation registers to overflow (Hindman, col. 14, lines 57-58), not to store the mixer samples.

In addition, Hindman does not disclose, and the Examiner has not cited, an address counter to generate an address modulo-KN and an adder to add one of the mixer samples to contents of the first location to generate a sum.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Vergegaal Bros. v. Union Oil Co. of

California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the...claim.” Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989). Since the Examiner failed to show that Hindman teaches or discloses any one of the above elements, the rejection under 35 U.S.C. §102 is improper.

Therefore, Applicants believe that independent claims 1, 11, 12, 16, 26, 27, 31, 41, and 42 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicants respectfully request the rejection under 35 U.S.C. §102(e) be withdrawn.

Allowable Subject Matter

Applicants note with appreciation the Examiner's indication of allowable subject matter for claims 11-15, 26-36, and 41-45. In light of the amendments and remarks, Applicants respectfully request all claims be allowed.

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: February 15, 2006

By


Thinh V. Nguyen

Reg. No. 42,034

Tel.: (714) 557-3800 (Pacific Coast)

Attachments

12400 Wilshire Boulevard, Seventh Floor
Los Angeles, California 90025

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8A)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

FACSIMILE

☒ deposited with the United States Postal Service
as first class mail in an envelope addressed to:
Commissioner for Patents, PO Box 1450,
Alexandria, VA 22313-1450.

☐ transmitted by facsimile to the United States Patent
and Trademark Office.

Date: February 15, 2006


Tu Nguyen

February 15, 2006

Date

